

AMENDMENTS TO THE CLAIMS

1. (Currently Amended) An image display apparatus comprising:
an imaging section which is formed as a charge-coupled device
(CCD) imaging device and converts an optical image to first signals
representing the image,

said imaging section including:

photoelectronic conversion devices arranged in the form of a
matrix formed by lines and columns for converting the optical image
to signal charges,

vertical transfer paths arranged adjacent to the respective
columns of said photoelectronic conversion devices, each of said
vertical transfer paths ~~transfers~~ transferring the signal charges
toward ~~a lower one~~ end in accordance with vertical driving pulses
~~supplied from the outside,~~

transfer gates for transferring the signal charges generated
by said photoelectronic conversion devices to the respective
vertical transfer paths in accordance with field shift pulses
~~supplied from the outside respectively, and~~

output circuits for converting the signal charges arrived at
the ~~lower ends~~ one end of said vertical transfer paths to the first
signals and outputting the first signals in parallel column by
column of said matrix, such that said imaging section outputs the
first signals ~~representing an image~~ without horizontally

transferring the signal charges provided by said vertical transfer paths; and

a display section which displays ~~an~~ the image represented by the first signals,

said display section including:

display devices arranged in the form of a matrix, each of said display devices ~~has a~~ having an image signal input terminal and a control signal input terminal, and ~~displays an~~ displaying the image represented by first signals applied to the image signal input terminal ~~thereto~~ at the time of application of driving pulses to the control signal input terminal,

W input circuits for receiving the first signals ~~output~~ from said imaging section in parallel column by column and outputting second signals corresponding to the received first signals to the image signal input terminals ~~of said display devices via over~~ signal buses in parallel column by column of said matrix, and

a vertical driving circuit for outputting the driving pulses to the control signal input terminals ~~of said display devices via over~~ control buses line by line of said matrix in a predetermined order.

2. (Canceled).

3. (Original) The image display apparatus according to claim 1, wherein said display section comprises a liquid crystal display.

4. (Currently Amended) An image display apparatus comprising:
an imaging section which is formed as a charge-coupled device (CCD) imaging device and converts an optical image to first signals representing the image,

said imaging section including:

photoelectronic conversion devices arranged in the form of a matrix formed by lines and columns for converting the optical image to signal charges,

vertical transfer paths arranged adjacent to the respective columns of said photoelectronic conversion devices, each of said vertical transfer paths ~~transfers~~ transferring the signal charges toward ~~a lower one~~ end in accordance with vertical driving pulses ~~supplied from the outside,~~

transfer gates for transferring the signal charges generated by said photoelectronic conversion devices to the respective vertical transfer paths in accordance with field shift pulses ~~supplied from the outside respectively,~~ and

output circuits for converting the signal charges arrived at the ~~lower ends one end~~ of said vertical transfer paths to the first signals and outputting the first signals in parallel column by column of said matrix, such that said imaging section outputs the

first signals ~~representing an image~~ without horizontally transferring the signal charges provided by said vertical transfer paths;

a signal conversion section for performing a processing ~~for~~ on the first signals output from said imaging section in parallel column by column and outputting ~~the~~ processed signals as second signals in parallel; and

a display section which displays ~~an~~ the image represented by the second signals,

said display section including:

display devices arranged in the form of a matrix, each of said display devices ~~has a~~ having an image signal input terminal and a control signal input terminal, and ~~displays an~~ displaying the image represented by the second signals applied to the image signal input terminal ~~thereto~~ at the time of application of driving pulses to the control signal input terminal,

input circuits for receiving the second signals ~~output~~ from said signal conversion section in parallel and outputting third signals corresponding to the received second signals to the image signal input terminals ~~of said display devices via~~ over signal buses in parallel column by column of said matrix, and

a vertical driving circuit for outputting the driving pulses to the control signal input terminals ~~of said display devices via~~

over control buses line by line of said matrix in a predetermined order.

5. (Canceled).

6. (Original) The image display apparatus according to claim 4, wherein said display section comprises a liquid crystal display.

7. (Currently Amended) The image display apparatus according to claim 4, further comprising:

an
a parallel-to-serial conversion section for converting the second signals ~~output in parallel from said signal conversion section~~ to serial signals.

8. (Currently Amended) An image display apparatus comprising:

an imaging section which is formed as a charge-coupled device (CCD) imaging device and converts an optical image to first signals representing the image,

said imaging section including:

photoelectronic conversion devices arranged in the form of a matrix formed by lines and columns for converting the optical image to signal charges,

vertical transfer paths arranged adjacent to the respective columns of said photoelectronic conversion devices, each of said vertical transfer paths ~~transfers~~ transferring the signal charges toward a ~~lower one~~ end in accordance with vertical driving pulses ~~supplied from the outside,~~

transfer gates for transferring the signal charges generated by said photoelectronic conversion devices to the respective vertical transfer paths in accordance with field shift pulses ~~supplied from the outside respectively, and~~

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output circuits for converting the signal charges arrived at the ~~lower ends one end~~ of said vertical transfer paths to the first signals and outputting the first signals in parallel column by column of said matrix, such that said imaging section outputs the first signals ~~representing an image~~ without horizontally transferring the signal charges provided by said vertical transfer paths;

a signal conversion section for performing a processing ~~for on~~ the first signals output in parallel from said imaging section column by column and outputting ~~the processed signals~~ as second signals in parallel; and

a parallel-to-serial conversion section for converting the second signals ~~output in parallel from said signal conversion section~~ to serial signals.

9. (Canceled).

10. (Currently Amended) A display apparatus comprising:

a serial-to-parallel conversion section for converting first signals serially input thereto and representing an image to parallel second signals and outputting the second signals;

a signal conversion section for performing a processing ~~for on~~ the second signals output in parallel from said serial-to-parallel conversion section column by column and outputting ~~the processed~~ signals as third signals in parallel; and

91 a display section which displays ~~an the~~ image represented by the third signals,

said display section including:

display devices arranged in the form of a matrix, each of said display devices ~~has a~~ having an image signal input terminal and a control signal input terminal, and ~~displays an~~ displaying the image represented by third signals applied to the image signal input terminal ~~thereto~~ at the time of application of driving pulses to the control signal input terminal,

input circuits for receiving the third signals ~~output from~~ said signal conversion section in parallel and outputting fourth signals corresponding the received third signals to the image signal input terminals ~~of said display devices via over~~ signal buses in parallel column by column of said matrix, and

a vertical driving circuit for outputting the driving pulses to the control signal input terminals ~~of said display devices via~~ over control buses line by line of said matrix in a predetermined order.

11. (Original) The display apparatus according to claim 10, wherein said display section comprises a liquid crystal display.

12. (Previously Presented) The image display apparatus according to claim 2, wherein said imaging section comprises a CCD imaging device with no horizontal transfer path.

13. (Previously Presented) The image display apparatus according to claim 5, wherein said imaging section comprises a CCD imaging device with no horizontal transfer path.

14. (Previously Presented) The image display apparatus according to claim 9, wherein said imaging section comprises a CCD imaging device with no horizontal transfer path.
